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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,708	04/25/2000	Christopher A. S. Gage	RSW920000039US1 (096)	8638

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

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04/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/557,708	Applicant(s) GAGE ET AL.	
	Examiner KRISTIE D. SHINGLES	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims 1-27 are pending examination.

Response to Arguments

I. In view of the Appeal Brief filed on 1/16/2008, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is a non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendment, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

II. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Specification

III. Applicant's disclosure (see page 12) is objected to because it contains an active embedded hyperlink and/or other form of browser-executable code. Applicant is required to

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delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Appropriate correction of any and all instances of informalities is required.

Claim Rejections - 35 USC § 101

IV. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

V. **Claims 12 - 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claims 12 - 21 recite “A computer program product” and “computer readable code means” which are directed to software, per se, and are thus non-statutory unless computer-implemented on a computer-readable medium.

Claim Rejections - 35 USC § 112

VI. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

VII. **Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.**

Claim 9 recites the limitation "all filtering" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

VIII. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

IX. Claims 7, 8, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kunzelman et al* (US 6,041,357) in view of *Masters* (US 6,374,300).

a. **Referring to claim 7, *Kunzelman et al* teaches a method of routing a request by an end user device to a particular one of a plurality of redundant servers residing behind a network dispatching mechanism, said methods comprising the steps of:**

- if said URL contains a valid routing token, further determining, at the network dispatching mechanism, if a session binding indicated by said routing token is old (*col.5 lines 38-65, col.6 lines 22-32*);
- if said URL contains a valid routing token and said routing token is not old, forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server indicated by said valid routing token (*col.6 lines 43-57*);
- removing, by said particular server, said valid routing information from the URL (*col.6 lines 43-57—parsing URL for session data*);
- storing, by said particular server, said routing information removed from said valid routing token, where said valid routing information can be accessed subsequently by an outbound data stream filter during the processing of an outbound reply related to said request (*col.7 lines 59-67—caching and storing data for further access*);
- accessing, by said particular server, a server-side storage location where information regarding a session between the particular server and the end user device is stored (*col.5 lines 38-62, col.7 lines 59-67*); and
- inserting, by said particular server, said session information into said request (*col.6 lines 43-52*).

However, *Kunzelman et al* fail to explicitly teach implementation of a dispatcher performing the steps of: receiving, at the network dispatching mechanism, a request for information indicated by a uniform resource locator (URL); determining, at the network dispatching mechanism, if said URL contains a valid routing token; if said URL contains a valid routing token, further determining, at the network dispatching mechanism, if a session binding indicated by said routing token is old; and if said URL contains a valid routing token and said routing token is not old, forwarding, by said network dispatching mechanism, the request, including the URL, to the particular server indicated by said valid routing token. Yet, *Masters* teach receiving a request at the controller and determining if the URL contains a valid cookie for a specific server and routing the client's request to a selected server, wherein the cookie information includes data that identifies the selected server, a hash value and a timestamp (*Figures 2-7, col.2 lines 27-58, col.5 line 33-col.6 line 31, col.9 lines 4-34, col.12 line 44-col.13 line 47*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Kunzelman et al* with *Masters* by implementing a dispatcher/controller to select the server to receive the request in order to load balance the client requests received over the network. Load balancing techniques are well-known and commonly used in the art for equally distributing client request across a plurality of servers.

b. **Claim 18** contains limitations that are substantially equivalent to claim 7 and is therefore rejected under the same basis.

c. **Per claim 8**, *Kunzelman et al* with *Masters* teach the method as claimed in claim 7, *Kunzelman et al* further teach wherein additional filtering of the URL is done prior to the forwarding step (*col.5 line 38-col.6 line 12*).

d. **Claim 19** is substantially equivalent to claim 8 and is therefore rejected under the same basis.

X. **Claims 1-3, 5, 6, 9, 12-14, 16, 22-24 and 22-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Brendel* (US 6,772,333) in view of *Masters* (US 6,374,300).

e. **Referring to claim 1**, *Brendel* teaches a method of establishing a persistent relationship between an end user device and a server where the server is one of a plurality of servers managed by a dispatcher and the end user device accesses the server using a uniform resource locator (URL), the method comprising the steps of:

- receiving at the dispatcher, a request for information from the end user device (*Abstract, col.3 lines 7-15*);
- determining by the dispatcher, which of the plurality of server to select for satisfying the request (*Abstract, figure 2, col.2 lines 18-67, col.4 line 63-col.5 line 2, col.5 lines 46-67—load balancer determines which server to receive the request*);
- creating, at the selected server, a token comprising at least an identifier for the selected server, a date/time stamp, and a key, said key for accessing a server-side storage area for information regarding the persistent relationship at the end user device (*Abstract, col.6 lines 8-38, col.7 lines 31-67, col.8 lines 16-42, col.9 lines 10-12, col.11 line 66-col.12 line 2—the server selected from the server farm creates a cookie and SSL session ID; the cookie has a server ID and SSL session ID has timestamp for expiration and key*); and
- sending, by the selected server to the client device, a response with the token (*col.11 lines 14-34, col.12 lines 30-62*).

Although *Brendel* teaches embedding the SSL component into a webpage (*col.12 lines 30-62*), *Brendel* fails to explicitly teach a token comprising at least an identifier for the

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selected server, a date/time stamp, and a key, said key for accessing a server-side storage area for information regarding the persistent relationship at the end user device and inserting the token into the URL. Yet, *Masters* teach receiving a request at the controller and determining if the URL contains a valid cookie for a specific server and routing the client's request to a selected server, wherein the cookie information includes data that identifies the selected server, a hash value and a timestamp (*Figures 2-7, col.2 lines 27-58, col.5 line 33-col.6 line 31, col.9 lines 4-34, col.12 line 44-col.13 line 47*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Brendel* with *Masters* by inserting a cookie into a URL in order for a server to associate a client's session with a particular URL and track/monitor the user's activity on a particular website—such tracking methods are well-known in the art.

f. **Claims 12 and 22** contain limitations that are substantially equivalent to claim 1 and are therefore rejected under the same basis.

g. **Per claim 2**, *Brendel* with *Masters* teach the method as claimed in claim 1, *Masters* further teaches wherein said token is encoded using a modified Base64 encoding (*col.15 lines 23-col.16 line 7*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to encode a token in a modified Base64 because modified Base64 is a standard encoding technique used for MIME email documents.

h. **Claims 13 and 23** are substantially equivalent to claim 2 and are therefore rejected under the same basis.

i. **Per claim 3**, *Brendel* with *Masters* teach the method as claimed in claim 1, *Brendel* further teaches wherein said token has a checksum or hash verification field (*Masters—col.16 lines 1-7*).

j. **Claims 14 and 24** are substantially equivalent to claim 3 and are therefore rejected under the same basis.

k. **Per claim 4**, *Brendel* with *Masters* teach the method as claimed in claim 3, *Masters* further teaches wherein said hash is a SHA-1 hash computed over said identifier for said selected server, said date/time stamp, and said key (*col.15 line 58-col.16 line 17*).

l. **Claims 15 and 25** are substantially equivalent to claim 4 and are therefore rejected under the same basis.

m. **Per claim 5**, *Brendel* with *Masters* teach the method as claimed in claim 3, *Masters* further teaches wherein said checksum or hash is encoded using a modified Base64 encoding (*col.15 line 58-col.16 line 7*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to encode a token in a modified Base64 because modified Base64 is a standard encoding technique used for MIME email documents.

n. **Claims 16 and 26** are substantially equivalent to claim 5 and are therefore rejected under the same basis.

o. **Per claim 6**, *Brendel* with *Masters* teach the method as claimed in claim 1, *Brendel* further teaches wherein said information regarding said persistent relationship is stored as a cookie on said server (*col.3 lines 7-56, col.6 lines 1-38, col.8 lines 32-67, col.13 lines 19-31; Masters—col.5 lines 14-40, col.6 lines 8-11*).

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p. **Claim 27** is substantially equivalent to claim 6 and is therefore rejected under the same basis.

q. **Per claim 9**, *Brendel* with *Masters* the method as claimed in claim 1, *Brendel* further teaches wherein all filtering is performed within the dispatcher (*col.5 line 53-col.6 line 7; Masters—col.6 lines 8-31, col.6 line 66-col.7 line 38*).

XI. Claims 10, 11, 17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over to *Gupta et al* (US 6,763,468) in view of *Masters* (US 6,374,300).

r. **Referring to claim 10**, *Gupta et al* teach a method of sending information to a requesting end user from an application over a session wherein said application resides at one of a plurality of redundant servers, said method comprising the steps of:

- receiving response information from said application, said response information including a URL (uniform resource locator) (*col.12 lines 10-14*);
- determining if a server-side key cookie has been used for storing session information between said end user and said application (*col.11 lines 57-66, col.12 lines 3-8—determining if a server-side access cookie has been used*);
- if a server-side key cookie has been used for storing session information, retrieving a session key from said key cookie (*col.12 lines 3-8 and 44-55—retrieving access session cookies*);
- if a key cookie was not used for storing session information, retrieving said session key from a control block (*col.12 lines 8-18*);
- storing said removed cookies in a predetermined server-side storage area (*col.6 lines 28-37, col.12 lines 48-55, col.13 lines 13-17—cookies are stored and maintained at the server*); and
- creating a sticky routing string (*col.12 lines 10-18, col.13 lines 13-21 and 40-45*).

Gupta et al teach updating cached session information and forwarding the updated session information to the server (*col.13 lines 13-21*), yet *Gupta et al* fail to explicitly

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teach removing all cookies from said response information; updating said URL to indicate the removal of said cookies; updating a date/time stamp in said sticky routing string; inserting said sticky routing string into said URL; and transmitting said response information, including said URL, to said end user. However, *Masters* teach receiving a request at the controller and determining if the URL contains a valid cookie for a specific server and routing the client's request to a selected server, wherein the cookie information includes data that identifies the selected server, a hash value and a timestamp and updating/rewriting of the cookie data (*Figures 2-7, col.2 lines 27-58, col.5 line 33-col.6 line 31, col.9 lines 4-34, col.11 line 20-col.12 line 25, col.12 line 44-col.13 line 47*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Gupta et al* with *Masters* for having a predetermined server-side storage for storing the cookies related to the user and the user's session, because this allows a user to later access a server and continue a previous session based off of the stored session information and by having a server-side key cookie because this allows the user to utilize multiple client devices in the same client-server session. Furthermore, it would have been obvious to insert the "sticky routing string" or token the URL in order to a server to associate a token with a particular URL and track/monitor the user's activity on a particular website—such tracking methods are well-known in the art.

s. **Claims 17 and 20** contain limitations that are substantially equivalent to claim 10 and are therefore rejected under the same basis.

t. **Per claim 11**, *Gupta et al* with *Masters* teach the method as claimed in claim 10, *Gupta et al* further teach wherein, prior to said determining step, said response information is

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transmitted from said application through one or more filters (*Abstract, col.7 lines 1-23, col.12 lines 3-67; Masters—col.6 lines 8-31, col.6 line 66-col.7 line 38*).

u. **Claim 21** is substantially equivalent to claim 11 and is therefore rejected under the same basis.

Conclusion

XII. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure: Miles et al (6886044), Squier et al (7188181), Farber et al (6185598), Bayeh et al (6098093), Courts et al (6076108), Shi et al (5875296).

Examiner's Note: Examiner has cited particular columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner. Should Applicant amend the claims of the claimed invention, it is respectfully requested that Applicant clearly indicate the portion(s) of Applicant's specification that support the amended claim language for ascertaining the metes and bounds of Applicant's claimed invention.

XIII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is (571)272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie D. Shingles
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/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144